NTCSS Program Review for the SCLSIS / Outfitting Conference

SPAWAR

Ntcss

Naval Tactical Command Support System

LCDR Steve Bowman
23 July 98
Integrated Information Solutions
For The Fleet

Purpose

"To review the Information Systems (IS) strategy for improving afloat logistics."

Topics

- **Program Overview**

- **Leveraging the Current Strategy**

- **Installation Schedule**
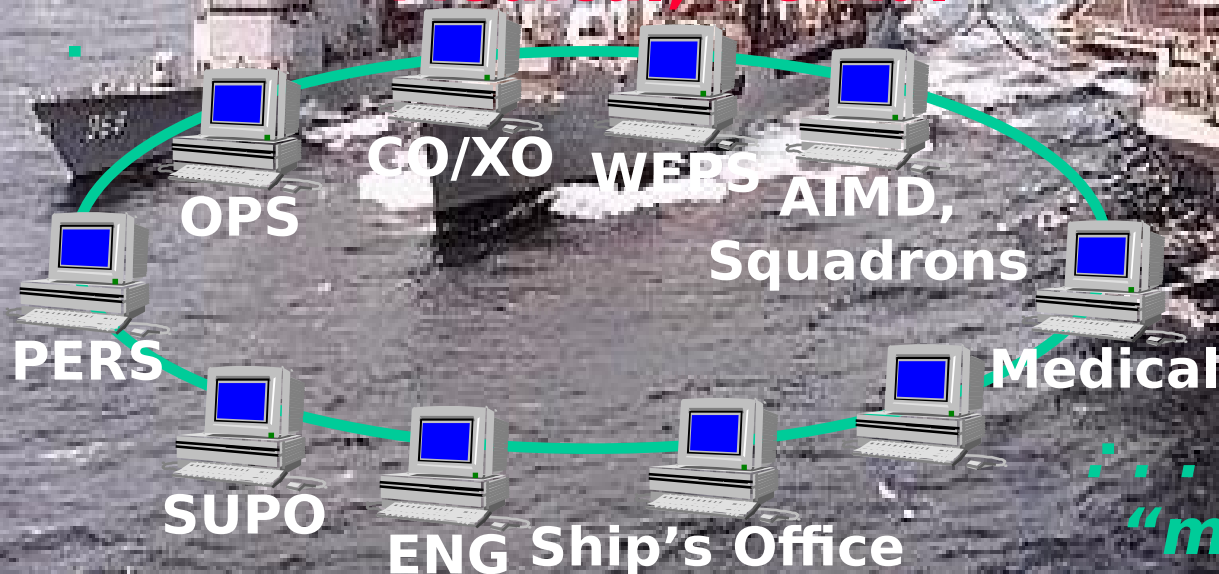
- **ESC Working Group Meeting**

Afloat Logistics Tail Processes
...the business of sustaining the fleet

SPAWAR

- **Surface/Subsurface Maintenance**
- **Aviation Maintenance**
- **Supply, Inventory, Financial**
- **Ordnance, Fuel, Transportation**
- **Manpower, Personnel**
- **Medical, Dental**

CO/XO WEPS AIMD, Squadrons

OPS

PERS

Medical

SUPO

ENG Ship's Office

. . . technology is a "means" - not an "end"

The NTCSS Strategy

...mitigating the risk, accumulating the benefits

For Fleet Users	Hardware Technology Insertion	Software Technology Insertion	Continuously Improving Processes
Legacy ✔ **Stovepipe Systems** ✔ **Tired Iron** ✔ **NOT Y2K Compliant**	**Ported** ✔ **Increased Connectivity** ✔ **Economical Hardware Maintenance** ✔ **Single Terminal on a Desk**	**Optimized** ✔ **Common System Software Services** ✔ **Economical Software Maintenance** ✔ **Y2K Compliant**	**To Be** ● **1 Afloat Logical Database** ● **Seamless Process Integration** ● **Leverage Investment**
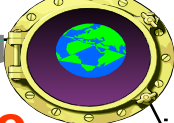
SNAP → **NTCSS** → **GCSS-M** →

Step #1
- ✓ **Common TAC Engine**
- ✓ **Common Operating Env**
- ✓ **Local/Wide Area Networking**
- ✓ **Digitized Tech Data**

Step #2
- ✓ **RDBMS Client/Server Architecture**
- ✓ **Object-Orientation**
- ✓ **Graphical User I/F**
- ✓ **IT21 Compatibility**

Step #3
- ● **Data Replication**
- ● **Intranet Web Services**
- ● **Fault Tolerant Web & Data Base Server**

For CIOs

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NTCSS Application Software

Legacy/Ported/Emulated · *Optimized*

Force Level

- SNAP I
  - SUADPS
  - OMMS
  - SNAP Admin
- NALCOMIS IMA

→

- R-Supply
- OMMS-NG
- R-Admin
- NALCOMIS IMA/OMA

Unit Level

- SNAP II
- SFM
- MDS
- SNAP Admin

→

- R-Supply
- OMMS-NG
- R-Admin

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Bandwidth = Connectivity

SPAWAR

1960   FY00-05   JV2010

LAND LINE   **FLEETSAT/UFO**   **DSCS**   **MILSTAR**   **GBS**   **FIBER**

1 Page Naval Message

75 Bps

Kbps

Mbps

Gbps

UHF SATCOM Voice
16 Kbps

NIPRNet UNCLAS Data
64 Kbps
SIPRNET GENSER INTEL
64 Kbps
JWICS SCI INTEL
64 Kbps

Sailor Phone
64 Kbps

PAO
64 Kbps

Air Tasking Order
256 Kbps

National Imagery
768 Kbps

LAN

VTC
(JWICS, VIXS, VTT)
128 Kbps
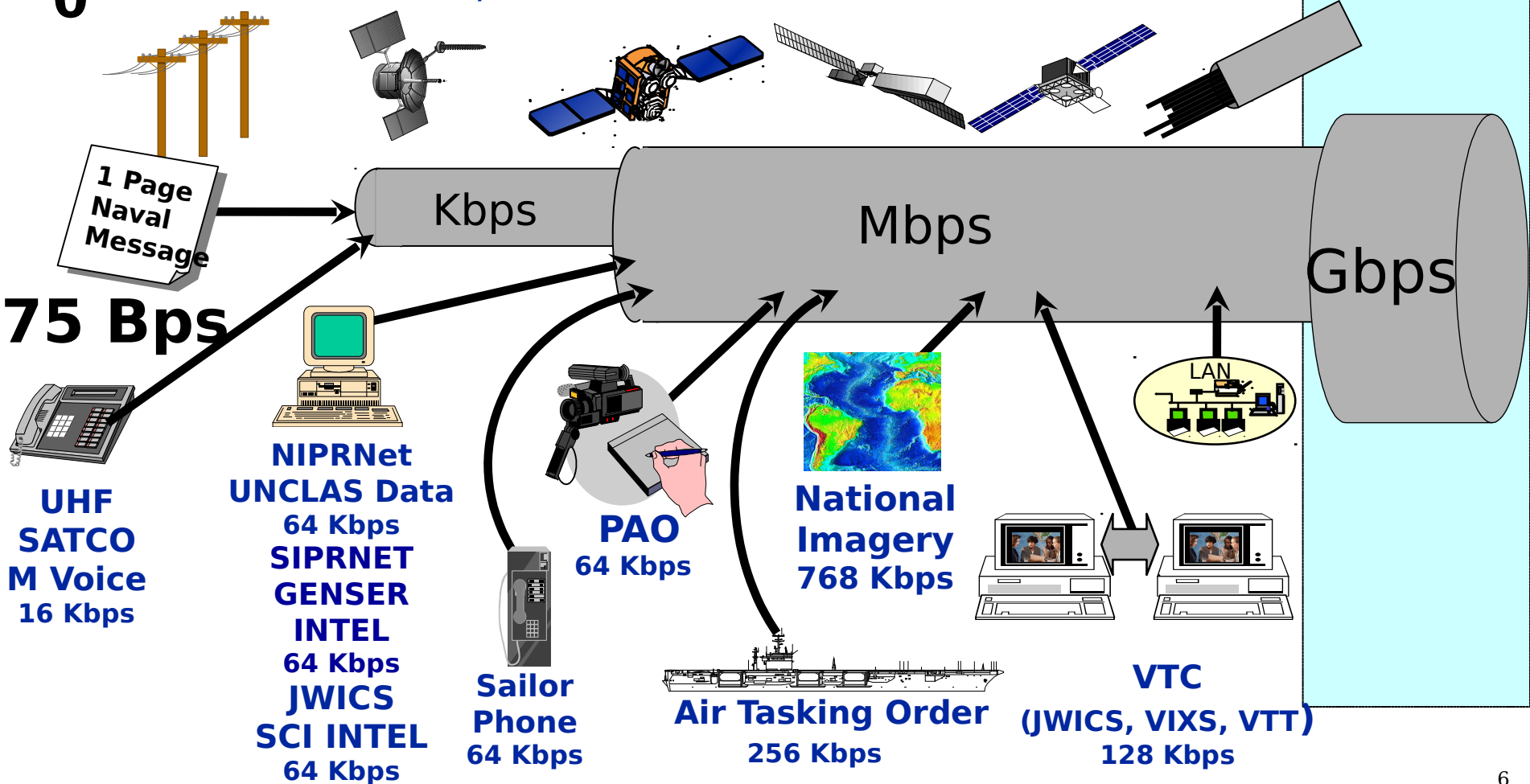
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The Mission Need for Improving Logistics
.... rightsizing the tooth-to-tail ratio

. . . The teeth need an effective tail!

IT-21 Installations

- PMW 151 (NTCSS Program Office)
  › Responsible for LAN installs through FY 98
    » NTCSS POR LAN installs
    » IT - 21 LAN installs

- SPAWAR 04 and PMW 158
  › Take over all LAN installs as of FY 99

Constellation/Peleliu BG/ARG Installation Schedule

CORONADO	AGF 11	SNAP III	SNAP III	NTCSS2	Full IT21
SACRAMENTO	AOE 1	SNAP II	No	SIAB	No
CHOSIN	CG 65	SNAP III	SNAP III	No Upgrade	No Upgrade
LAKE ERIE	CG 70	SNAP III	SNAP III	No Upgrade	No Upgrade
CONSTELLATION	CVN 64	SNAP III	SNAP III	No Upgrade	No Upgrade
KINKAID	DD 965	SNAP III	SNAP III	No Upgrade	No Upgrade
BENFOLD	DDG 65	SNAP III	SNAP III	No Upgrade	No Upgrade
PELELIU	LHA 5	SNAP III	SNAP III	No Upgrade	No Upgrade
OGDEN	LPD 5	SNAP III	SNAP III	No Upgrade	No Upgrade
RUSHMORE	LSD 47	SNAP III	SNAP III	No Upgrade	No Upgrade
OLYMPIA	SSN 717	SNAP III	SNAP III	No Upgrade	No Upgrade
SANTE FE	SSN 763	SNAP III	SNAP III	No Upgrade	No Upgrade

JFK/BATTAN BG/ARG Installation Schedule

Activity	Hull	Current Configuration		FY 99 Installation	
		NTCSS Application	Unclas LAN	NTCSS	LAN
SEATTLE	AOE 3	SNAP III	SNAP III	CFCP	Partial IT21 POR
HUE CITY	CG 66	SNAP II	No	Full Optimized	Full IT21
VICKSBURG	CG 69	SNAP II	No	Full Optimized	Full IT21
JOHN F KENNEDY	CV 67	SNAP III	SNAP III	NTCSS2	Full IT21
ARTHUR W RADFORD	DD 968	SNAP II	No	Full Optimized	Partial IT21 POR
LABOON	DDG 58	SNAP III	SNAP III	CFCP	No upgrade
BARRY	DDG 52	SNAP III	SNAP III	CFCP	No upgrade
MAHAN	DDG 72	SNAP III	SNAP III	CFCP	No upgrade
SAMUEL B ROBERTS	FFG 58	SNAP II	No	Full Optimized	Partial IT21 POR
KAUFFMAN	FFG 59	SIAB	No	CFCP	No upgrade
MOUNT WHITNEY	LCC 20	SNAP III	SNAP III	NTCSS2	Full IT21
BATAAN	LHD 5	SNAP III	SNAP III	NTCSS2	Full IT21
SHREVEPORT	LPD 12	SNAP III	SNAP III	NTCSS2	Full IT21
WHIDBEY ISLAND	LSD 41	SNAP III	SNAP III	NTCSS2	Full IT21
JACKSONVILLE	SSN 699	SNAP III	SNAP III	No upgrade	No upgrade
SPRINGFIELD	SSN 761	SNAP III	SNAP III	No upgrade	No upgrade

Activity	Hull	Current Configuration		FY 99 Installation	
		NTCSS Application	Unclas LAN	NTCSS	LAN
MOUNT BAKER	AE 34	SNAP III	SNAP III	CFCP	No Upgrade
NORMANDY	CG 60	SNAP III	SNAP III	NTCSS2	Full IT21
MONTEREY	CG 61	SNAP III	SNAP III	NTCSS2	Full IT21
EISENHOWER	CVN 69	SNAP III	SNAP III	NTCSS2	Full IT21
SPRUANCE	DD 963	SNAP III	SNAP III	CFCP	No Upgrade
JOHN HANCOCK	DD 981	SNAP II	No	Full Optimized	Partial IT21 POR
CARNEY	DDG 64	SNAP III	SNAP III	CFCP	No Upgrade
THE SULLIVANS	DDG 68	SNAP III	SNAP III	CFCP	No Upgrade
UNDERWOOD	FFG 36	SNAP II	No	Full Optimized	Partial IT21 POR
TAYLOR	FFG 50	SNAP III	SNAP III	CFCP	No Upgrade
WASP	LHD 1	SNAP III	SNAP III	NTCSS2	Full IT21
TRENTON	LPD 14	SNAP II	No	Full Optimized	Full IT21
ASHLAND	LSD 48	SNAP III	SNAP III	NTCSS2	Full IT21
BOISE	SSN 764	SNAP III	SNAP III	No Upgrade	No Upgrade
HARTFORD	SSN 768	SNAP III	SNAP III	No Upgrade	No Upgrade

Stennis BG / Bon Homme Richard ARG Installation Schedule

SPAWAR

Activity	Hull	Current Configuration		FY 99 Installation	
		NTCSS Application	**Unclas LAN**	**NTCSS**	**LAN**
BRIDGE	AOE 10	SNAP III/NT	IT21	No Upgrade	No Upgrade
LAKE CHAMPLAIN	CG 57	SNAP II	No	Full Optimized	Full IT21
PORT ROYAL	CG 73	SNAP III	SNAP III	NTCSS2	Full IT21
JOHN STENNIS	CVN 74	SNAP III	SNAP III	NTCSS2	Full IT21
ELLIOTT	DD 967	SNAP II	No	Full Optimized	Partial IT21 POR
CROMMELIN	FFG 37	SNAP II	No	Full Optimized	Partial IT21 POR
BON HOMME RICHARD	LHD 6	NTCSS2	IT21	No Upgrade	No Upgrade
DENVER	LPD 9	SNAP III	SNAP III	NTCSS2	IT21
PEARL HARBOR	LSD 52	NTCSS2	NTCSS/NT	No Upgrade	IT21
SALT LAKE CITY	SSN 716	SNAP III	SNAP III	No Upgrade	No Upgrade
ASHEVILLE	SSN 758	SNAP III	SNAP III	No Upgrade	No Upgrade

Activity	Hull	Current Configuration		FY 99 Installation	
		NTCSS Application	Unclas LAN	NTCSS	LAN
VALLEY FORGE	CG 50	SNAP II	No	SIAB	No upgrade
COWPENS	CG 63	SNAP II	No	SIAB	No upgrade
SHILO	CG 67	SNAP II	No	SIAB	No upgrade
ANZIO	CG 68	SNAP II	No	SIAB	No upgrade
STUMP	DD 978	SNAP II	No	SIAB	No upgrade
STARK	FFG 31	SNAP II	No	Full Optimized	Non-IT21 POR
JOHN L. HALL	FFG 32	SNAP II	No	Full Optimized	Non-IT21 POR
DOYLE	FFG 39	SNAP II	No	Full Optimized	Non-IT21 POR
DE WERT	FFG 45	SNAP II	No	Full Optimized	Non-IT21 POR
R. G. BRADLEY	FFG 49	SNAP II	No	Full Optimized	Non-IT21 POR
CARR	FFG 52	SNAP II	No	Full Optimized	Non-IT21 POR
HAWES	FFG 53	SNAP II	No	Full Optimized	Non-IT21 POR
TENNESSEE	SSBN 734	SNAPII/MSNAP	No	Full Optimized	Non-IT21 POR
PENNSYLVANIA	SSBN 735	SNAPII/MSNAP	No	Full Optimized	Non-IT21 POR
NEBRASKA	SSBN 739	SNAPII/MSNAP	No	Full Optimized	Non-IT21 POR
RHODE ISLAND	SSBN 740	SNAPII/MSNAP	No	Full Optimized	Non-IT21 POR

New Construction Installation Schedule

Activity	Hull	Current Configuration		FY 99 Installation	
		NTCSS Application	**Unclas LAN**	**NTCSS**	**LAN**
NIMITZ	CVN 68	SNAP III	SNAP III	Full Optimized	Non-IT21 POR
TRUMAN	CVN 75	NTCSS2	IT21	No upgrade	No upgrade
HIGGINS	DDG 76	None	None	Full Optimized	Full IT21
O'KANE	DDG 77	None	None	Full Optimized	Full IT21
PORTER	DDG 78	None	None	Full Optimized	Full IT21
OSCAR AUSTIN	DDG 79	None	None	Full Optimized	Full IT21

Training / Support Sites Installation Schedule

Activity	Hull	Current Configuration		FY 99 Installation	
		NTCSS Application	**Unclas LAN**	**NTCSS**	**LAN**
TRF Bangor	Train/Supt	All Legacy Sys	All Legacy Sys	Full Optimized	Non-IT21 POR
NTTC Meridian	Train/Supt	All Legacy Sys	All Legacy Sys	Full Optimized	Non-IT21 POR
ILO Sites (4)	Train/Supt	All Legacy Sys	All Legacy Sys	Optimized	No upgrade
Y2K Sites (5)	Train/Supt	All Legacy Sys	All Legacy Sys	Optimized	No upgrade

NTCSS FY00-FY05 Ship Installation Schedule

Hull Type	Number of Installs per Fiscal Year						Type of Install	
	FY00	FY01	FY02	FY03	FY04	FY05	LAN	NTCSS
AE	0	0	0	0	3	0	IT21	Optimized
AO	0	0	0	0	5	0	IT21	Optimized
AOE	0	0	0	0	8	0	IT21	Optimized
ARS	0	0	0	0	0	0	IT21	Optimized
AS	0	0	0	0	2	0	IT21	Optimized
CG	8	4	4	0	0	0	IT21	Optimized
CVN	3	2	1	1	0	0	IT21	Optimized
DD	0	0	0	0	17	0	IT21	Optimized
DDG	12	12	0	7	0	0	IT21	Optimized
FFG	0	0	0	0	22	0	IT21	Optimized
LHA	1	1	0	0	0	0	IT21	Optimized
LHD	1	1	1	1	0	0	IT21	Optimized
LSD	0	3	3	2	0	0	IT21	Optimized
LPD	0	2	0	4	0	0	IT21	Optimized
MCM	0	0	10	0	0	0	IT21	Optimized
MCS	0	0	0	0	0	0	IT21	Optimized
SSN	3	9	17	17	0	0	IT21	Optimized
SSBN	0	2	1	0	11	0	IT21	Optimized
Total	28	36	37	44	72	0	IT21	Optimized

Training/Support/Other Site Installation Schedule

Site	Type of Activity	Year of Installation						Type of Install	
		FY00	FY01	FY02	FY03	FY04	FY05	LAN	NTCSS
Puget Sound	ILO Site	X						IT21	Optimized
New London	ILO Site	X						IT21	Optimized
Sasebo	ILO Site	X						IT21	Optimized
Yokosuka	ILO Site	X						IT21	Optimized
Pearl Harbor	ILO Site	X						IT21	Optimized
Portsmouth	ILO Site	X						IT21	Optimized
Jacksonville (2)	ILO Site	X						IT21	Optimized
Ingleside, TX	ILO Site	X						IT21	Optimized
San Diego (2)	ILO Site	X						IT21	Optimized
CSI San Diego	Trng/Supt		X					IT21	Optimized
FTSC San Diego	Trng/Supt			X				IT21	Optimized
FASO DET Miramar	Trng/Supt			X				IT21	Optimized
Sub School Groton	Trng/Supt				X			IT21	Optimized
NSCS Athens	Trng/Supt				X			IT21	Optimized
FASO DET Jacksonville	Trng/Supt				X			IT21	Optimized
STF Norfolk	Trng/Supt					X		IT21	Optimized
STF San Diego	Trng/Supt					X		IT21	Optimized
FASO DET Cherry Point	Trng/Supt					X		IT21	Optimized
ATG/FTG MIDPAC SysAdmin	Trng/Supt						X	IT21	Optimized
Focal Point NOB Pier 7	Trng/Supt						X	IT21	Optimized
FTCLANT Dam Neck	Trng/Supt						X	IT21	Optimized
TTF Bangor	Trng/Supt						X	IT21	Optimized
NSTCPAC Functional User	Trng/Supt						X	IT21	Optimized
SWOSCOL Newport	Trng/Supt						X	IT21	Optimized
NATTC Pensacola	Trng/Supt						X	IT21	Optimized
TTF Kings Bay	Trng/Supt						X	IT21	Optimized

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- Current process is broken
  - › Too many baselines
  - › Schedule and cost impacts
  - › Lack of requirement visibility
  - › Requirements creep
  - › Inability to match funding to requirement
  - › Lack of solution development feedback
  - › Lack of consistent configuration management

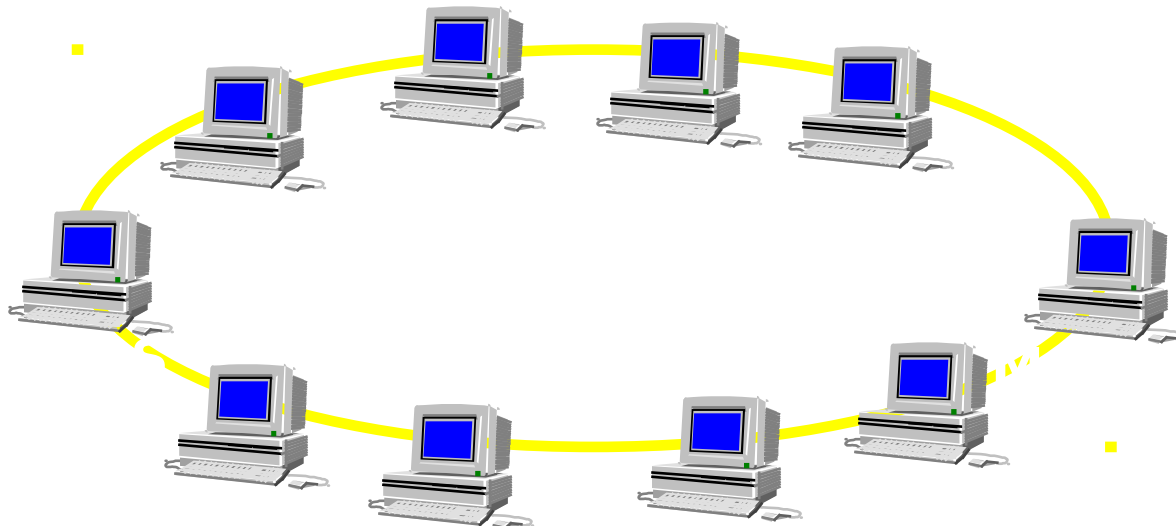# Requirements Management Proposal

- Web based tool will:
  - › Capture new requirements
  - › Prioritize requirements
    - » On-line review and voting
  - › Match funding to requirements
  - › Track progress
    - » Single on-line source of status
- New process provides:
  - › Engineering discipline and efficiency
  - › Synchronization of dollars and requirements
  - › Cradle to grave traceability

OPTIMIZED SUITE
Ntcss
NTCSS
Naval Tactical Command Support System

+

Integrated Communications

=

SPAWAR

. . . the technological "means"

to the logistics "end" . . .

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Points of Contact

Code/Position	Name	Phone Number
PMW 151 Program Manager	CAPT Spear Ezzard*	(619) 524-7553
PMW 151A Deputy Program Manager	Ms. Susan Linn	(619) 524-7555
PMW 151-1 Customer Liaison Div.	CDR Charlie Bell	
PMW 151-2 (acting) System Acq. and Eng.	Mr. Dan Inman	(619) 524-7569
PMW 151-3 Functional Requirements	CDR Jay Chase	(619) 524-7567
PD 15L Logistics Coordinator	Mr. Mike Crow	
PMW 151-4 Program Development Div	Mr. Mike Taousakis	(619) 524-7566
		(619) 524-7545

Http://itnet.spawar.navy.mil/pmw151/

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LCDR Tony Encinias / PMW 151-3B

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PMW 151 website:

http://itnet.spawar.navy.mil/pmw151/

Requirement to Product

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User Submits Requirement → SSC Assign TC# → Initial Analysis by Fleet Support

- Functional → Flt Sup Specialist
- S/W Modification → Escalate to TR ← SSC Chesapeake (SMTS)
- S/W Enhancement → Escalate to CP Initial Impact Assessment

Requirements Capture/Validation

Study → Research

CNO / Fleet Voting Reps → Submit in CRWG Database → Initial Staffing (Req. owner & respective Fleet Voting Rep) → Approve?

- Yes → Review & Vote by other Fleet Voting Reps → Approved & Prioritized Requirements Baseline → N62 Validates
- No → Disapprove → Notify Originator → Notify SMTS Database

PMW-151

Technical Solution/Implementation

Technical Analysis

Funding Commitment?
- Funded
- No → Awaiting Funding
- Yes → Technical Validation/Work Approval Process

Make or Buy?
- Functional Baseline → Develop GOTS
- System Specifications Baseline → Acquire COTS

SSC Chesapeake (SMTS)

Develop GOTS → System Test → Functional Test → Integration Testing (TCT) → Deliver to User

Acquire COTS → System Test

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